

IN THE UNITED STATES DISTRICT COURT  
FOR THE DISTRICT OF DELAWARE

SPIDER SEARCH ANALYTICS LLC,

Plaintiff,

v.

SHUTTERSTOCK, INC.,

Defendant.

C. A. No. 1:18-cv-745-VAC-MPT

**JURY TRIAL DEMANDED**

**SHUTTERSTOCK, INC.'S OPENING BRIEF IN  
SUPPORT OF ITS MOTION TO DISMISS FOR FAILURE TO STATE A CLAIM**

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## **I. NATURE AND STAGE OF PROCEEDINGS**

On May 16, 2018, Spider Search Analytics LLC filed this lawsuit accusing Shutterstock, Inc. of infringing “at least claim 1” of U.S. Patent No. 7,454,430 by Shutterstock’s alleged use of the 80legs’ app to perform web crawls. D.E. 1 (“Compl.”) ¶¶ 12-15.

## **II. SUMMARY OF THE ARGUMENT**

The claims of the ’430 Patent are directed to the abstract idea of searching for and identifying relevant information. But searching for and identifying relevant information is not a technological improvement, an inventive way of applying conventional technology, or even new (as the specification acknowledges). *Intellectual Ventures I LLC v. Capital One Fin. Corp.*, 850 F.3d 1332 (Fed. Cir. 2017) (holding claims directed to “organizing, displaying, and manipulating data” abstract). Moreover, none of the claims recites any specific hardware or software. Instead, the claims are described only in functional terms, and these functions are described in the specification only as a “set of rules” and generic algorithms. The ’430 Patent does no more than withdraw a basic idea (searching for and identifying relevant information) from the public domain without disclosing any particularized application of that idea. Therefore, the ’430 Patent is invalid under 35 U.S.C. § 101 for failure to claim patent-eligible subject matter.

Resolving this issue does not require discovery or formal claim construction. To avoid waste of resources unnecessarily litigating an invalid patent, Shutterstock thus requests that the Court dismiss the Complaint. FED. R. CIV. P. 12(b)(6).

## **III. STATEMENT OF FACTS**

### **A. The ’430 Patent**

The ’430 Patent issued on November 18, 2008, and is entitled “System and Method for Facts Extraction and Domain Knowledge Repository Creation from Unstructured and Semi-Structured Documents.” Compl. ¶ 7. Of the 27 claims, 3 are independent (Claims 1, 5, 10), and 24

are dependent (Claims 2, 3, 4, 6, 7, 8, 9, 11-27). The claims of the '430 Patent are generally directed to methods for searching web URLs (i.e., web crawling) to find information relevant to a particular application.<sup>1</sup> In the applicants' own words, the claims relate to a method for "information retrieval, processing, and storing" for both static and dynamic websites. '430 Patent at 1:17-22.

The applicants acknowledged that web crawling was not new. For example, "statistically generated ontology of a subject area and generating tools to navigate the Internet and other sources of information using this ontology and key words" was in the prior art. *Id.* at 1:49-53. They further noted that some of the prior art, such as Google, "went even further and generated the relevance index to prioritize pieces of information (e.g. web pages) by their 'importance' and 'relevance' to the question." *Id.* at 1:53-56 (some internal quotation marks omitted). Moreover, search portals like Google could "narrow the list of potentially relevant pages using keyword search." *Id.* at 4:45-47. But "[d]eep or dynamic web constitutes a significant challenge for web crawlers" because the "page that is rendered does not exist and is generated after the request for it is made." *Id.* at 4:54-59. Moreover, the content to be searched is "typically contained in the server database." *Id.* at 4:58-60. The applicants noted that "[t]he major problem [with dynamic sites] is to find out what questions to ask [based on information contained in standard DHTML forms associated with the site] to retrieve the information from the databases, and how to obtain all of it." *Id.* at 5:11-13. The applicants explained that this "keyword search" process "can be viewed as a process of sending scouts to find a number of objects that resemble what one is looking for." *Id.* at 2:13-15.

Claim 1, set forth below, is representative of the claims:

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<sup>1</sup> The specification discloses eight embodiments, including: (I) converting unstructured and semi-structured information; (II) information retrieval; (III) fact, number, and object extraction; (IV) web crawler construction; (V) automatic article and extraction; (VI) time stamp extraction and verification; (VII) grammatical rules and parsing; and (VIII) object identification. During prosecution of the application, however, the applicants elected (IV), the embodiment drawn to web crawler construction.

1. A method for crawling the internet to locate pages relevant to an application and thus building a Web Crawler comprising:

starting from a base set of application-dependent web pages or crystallization points; and

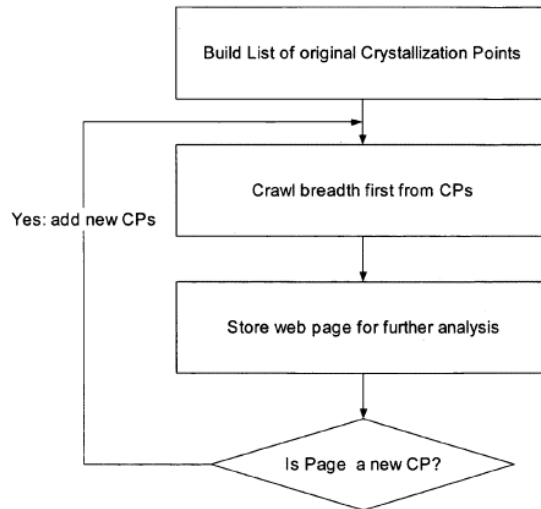
applying breadth-first recursive crawling.

*Id.* at cl. 1.

The applicants explained that obtaining a base set of application-dependent web pages or crystallization points (“CP”) was “easy.” *Id.* at 13:10-11. For example, for business related searches, the base set of CPs may include “Urls of Fortune 10,000 companies’ web sites and 1000 business publications’ websites.” *Id.* at 13:11-13. A relevant page can be added to the list of CPs if it has certain features, like “more than four relevant links, or less than four but to or from an ‘important’ page,” or if “it contains a link to a CP.” *Id.* at 13:14-17. According to the applicants, “relevant” links are simply those that “contain[] keywords from a predefined list.” *Id.* at 13:19-22. “[T]he crawl is done breadth first,” starting with the initial set of CPs. *Id.* at 13:32-33. The applicants explained that “breadth first” means “that all links from a particular page are first explored then each one of them is used as a starting point for the next step.” *Id.* at 13:33-35. “The crawl stops if one of the following is true, (i) a page is terminal [(i.e., it has no relevant links)], or (ii) the maximum distance [typically 2 or 3, no more than 4] from CPs is reached.” *Id.* at 13:35-42.

The simplicity of this process is shown in Figure 4:



**FIGURE 4: WEB CRAWLING AND CRYSTALLIZATION POINTS**

*Id.* at Fig. 4. No technical details are provided as to how the system functions to build the list of original CPs, crawl breadth-first from the list of CPs, store the web page for further analysis, determine if the web page is a new CP, or add a page to the CP list. Instead this functionality is described (and claimed) only at the highest level of generality.

#### IV. ARGUMENT

##### A. Legal Standard.

##### 1. This Case Should Be Disposed of at the Pleading Stage through Rule 12(b)(6).

Under Rule 12(b)(6), a party may move to dismiss a complaint that fails to state a claim upon which relief can be granted. To survive a Rule 12(b)(6) motion, a complaint “must allege facts that ‘raise a right to relief above the speculative level on the assumption that the allegations in the complaint are true (even if doubtful in fact).’” *Victaulic Co. v. Tieman*, 499 F.3d 227, 234 (3rd Cir. 2007) (citation omitted). In deciding a Rule 12(b)(6) motion, courts consider documents attached to or incorporated into the complaint as well as facts alleged in the complaint. *Gibbs v.*

*Coupe*, No. CV 14-790-SLR, 2015 WL 6870033, at \*1 (D. Del. Nov. 6, 2015) (citation omitted). Although factual allegations are taken as true, legal conclusions are given no deference—those matters are left for the court to decide. *See Ashcroft v. Iqbal*, 556 U.S. 662, 678 (2009) (noting tenet that allegations are taken as true on a motion to dismiss “is inapplicable to legal conclusions”). “[W]hen the allegations in a complaint, however true, could not raise a claim of entitlement to relief [as a matter of law], this basic deficiency should . . . be exposed at the point of minimum expenditure of time and money by the parties and the court.” *Cuvillier v. Sullivan*, 503 F.3d 397, 401 (5th Cir. 2007) (internal citations and quotations omitted).

Patentability under 35 U.S.C. § 101 is a threshold legal issue. *Bilski v. Kappos*, 561 U.S. 593, 602 (2010). Accordingly, the § 101 inquiry is properly raised at the pleadings stage if it is apparent from the face of the patent that the asserted claims are not directed to eligible subject matter. *See Ultramercial, Inc. v. Hulu, LLC*, 772 F.3d 709, 718-19 (Fed. Cir. 2014) (Mayer, J., concurring). In those situations, claim construction is not required to conduct a § 101 analysis. *Bancorp Servs. L.L.C. v. Sun Life Assur. Co.*, 687 F.3d 1266, 1273 (Fed. Cir. 2012) (“[W]e perceive no flaw in the notion that claim construction is not an inviolable prerequisite to a validity determination under § 101.”).

## 2. The Law of 35 U.S.C. § 101.

Section 101 of the Patent Act sets forth four categories of patentable subject matter: “any new and useful process, machine, manufacture, or composition of matter.” 35 U.S.C. § 101. Also, the law recognizes three exceptions to patent eligibility: “laws of nature, physical phenomena, and *abstract ideas*.” *Diamond v. Chakrabarty*, 447 U.S. 303, 308 (1980) (emphasis added). Abstract ideas are ineligible for patent protection because a monopoly over these ideas would preempt their use in all fields. *See Bilski*, 561 U.S. at 611-12. In other words, “abstract intellectual concepts are

not patentable, as they are the basic tools of scientific and technological work.” *Id.* at 653 (quoting *Gottschalk v. Benson*, 409 U.S. 63, 67 (1972)).

Determining whether a patent claim is impermissibly directed to an abstract idea involves two steps. First, the court determines “whether the claims at issue are directed to a patent-ineligible concept.” *Alice Corp. Pty. Ltd. v. CLS Bank Int’l*, 134 S. Ct. 2347, 2355 (2014). Second, if the claim contains an abstract idea, the court evaluates whether there is “an ‘inventive concept’—*i.e.*, an element or combination of elements that is sufficient to ensure that the patent in practice amounts to significantly more than a patent upon the ineligible concept itself.” *Id.* (internal quotations and citations omitted).

Transformation into a patent-eligible application requires “more than simply stating the abstract idea while adding the words ‘apply it.’” *Id.* at 2357 (quoting *Mayo Collaborative Servs. v. Prometheus Labs., Inc.*, 132 S. Ct. 1289, 1294 (2012)). Indeed, if a claim could be performed in the human mind, or by a human using pen and paper, it is not patent-eligible. *CyberSource Corp. v. Retail Decisions, Inc.*, 654 F.3d 1366, 1372 (Fed. Cir. 2011). Also, a claim is not meaningfully limited if it includes only token or insignificant pre- or post-solution activity—such as identifying a relevant audience, category of use, field of use, or technological environment. *Mayo*, 132 S. Ct. at 1297-98, 1300-01; *Bilski*, 561 U.S. at 610; *Diamond v. Diehr*, 450 U.S. 175, 191-92 & n.14 (1981); *Parker v. Flook*, 437 U.S. 584, 595 n.18 (1978). Finally, “simply appending conventional steps, specified at a high level of generality, to laws of nature, natural phenomena, and abstract ideas cannot make those laws, phenomena, and ideas patentable.” *Mayo*, 132 S. Ct. at 1300; *see also Fort Props., Inc. v. Am. Master Lease LLC*, 671 F.3d 1317, 1323 (Fed. Cir. 2012) (“Such a broad and general limitation does not impose meaningful limits on the claim’s scope.”).

**B. The '430 Patent is Invalid under 35 U.S.C. § 101.**

Spider Search's Complaint should be dismissed. The claims of the '430 Patent are invalid under 35 U.S.C. § 101 because they fail both prongs of the *Alice* test. Each of the claims is directed to the abstract idea of searching for and identifying relevant information. Abstract ideas are not eligible for patenting. None of the claims contains an "inventive concept sufficient to ensure that the patent in practice amounts to *significantly more* than a patent upon the ineligible concept itself." *See Alice*, 134 S. Ct. at 2355 (emphasis added). Because Spider Search has failed to state a claim upon which relief may be granted, Shutterstock respectfully requests that the Court grant its motion and dismiss this case with prejudice. FED. R. CIV. P. 12(b)(6).

**1. *Alice* Step 1—Claim 1 is directed to an abstract idea, and courts have found similar claims to be patent-ineligible.**

In determining patent eligibility under § 101, the Court must first determine whether the claims are directed to an abstract idea. *Alice*, 134 S. Ct. at 2355. Under any plausible reading, the claims of the '430 Patent are directed to a patent-ineligible, abstract idea because they claim nothing more than the "longstanding," "routine," and "conventional" concept of searching for and identifying relevant information. *See Alice*, 134 S. Ct. at 2356; *Bilski*, 561 U.S. at 611.

**(a) Claim 1 of the '430 Patent is directed to the abstract idea of searching for and identifying relevant information.**

Asserted Claim 1 of the '430 Patent is representative of the claims.<sup>2</sup> *See, e.g., Phoenix Licensing, L.L.C. v. Consumer Cellular, Inc.*, No. 2:16-cv-152-JRG-RSP, 2017 WL 1065938, at \*8-9 (E.D. Tex. Mar. 8, 2017) (invalidating 974 claims after analyzing only a few "representative claims" where the other claims were "substantially similar" and "linked to the same abstract

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<sup>2</sup> Where claims are "substantially similar and linked to the same abstract idea," courts may look to representative claims in a § 101 analysis. *Content Extraction and Transmission LLC v. Wells Fargo Bank, Nat'l Ass'n*, 776 F.3d 1343, 1349 (Fed. Cir. 2014).

idea.”). In assessing whether this claim is directed to an abstract idea, the Court must look past the claim language for the purpose of the claim to determine what the invention is trying to achieve. *Morales v. Square, Inc.*, 75 F. Supp. 3d. 716, 725 (W.D. Tex. 2014), *aff’d*, 621 F. App’x 660 (Fed. Cir. 2015), *cert. denied*, 136 S. Ct. 1461 (2016). All Claim 1 is “trying to achieve” is a way to search for and identify relevant information, consisting of nothing more than a set of basic ideas like (i) starting with a set of classified or categorized information and (ii) searching for and identifying relevant information to add to the initial set:

Claim Language	Claimed Idea
A method for crawling the internet to locate pages relevant to an application and thus building a Web Crawler comprising:	
starting from a base set of application-dependent web pages or crystallization points; and	Starting with a set of classified information
applying breadth-first recursive crawling.	Searching for and identifying relevant data

At a high level, this claim describes the most generic functional steps for searching for information relevant to a particular category. Such a broad concept is not patent eligible because it “recite[s] an abstraction—an idea, having no particular concrete or tangible form.” *Ultramercial*, 772 F.3d at 715. Moreover, the applicants failed to disclose any technical details of how to achieve such a search and instead describe the method only at a high level of generality—that is, the claims cover only the resulting system the applicants envisioned, not how to implement it, much less how to do so in any non-conventional manner. *See Internet Patents Corp. v. Active Network, Inc.*, 790 F.3d 1343, 1348 (Fed. Cir. 2015) (concluding that claim not directed to patent-eligible subject matter where “[t]he mechanism for maintaining the state is not described, although this is stated to be the essential innovation”).

For example, the specification indicates that obtaining “a base set of application-dependent web pages or crystallization points” was “easy” and consists only of defining a particular category of information to be searched. ’430 Patent at 13:10-13 (“Initial CP’s depend on the application, but usually are easy to obtain. For Business Information Network the list consists of the Urls of Fortune 10,000 companies’ web sites and 1000 business publications websites.”). But the concept of classifying information is abstract. *See In re TLI Commc’ns LLC Patent Litig.*, 823 F.3d 607, 611 (Fed. Cir. 2016) (holding claims “drawn to the concept of classifying an image and storing the image based on its classification” abstract). And performing a “breadth-first” crawl consists only of sequentially “exploring” all links from each CP to determine their relevancy.’430 Patent at 13:19-22 (“A link (Href in html) is called relevant if it or its description contains keywords from a predefined list. In case of Business Information Network this list can include keywords such as ‘customer’, ‘vendor’, ‘press release’, ‘executive’, and the like.”). No further details are provided, much less claimed.

Claim 1 is abstract because its steps can be performed entirely in the human mind. *See CyberSource*, 654 F.3d at 1373 (“Methods which can be performed entirely in the human mind are unpatentable not because there is anything wrong with claiming mental method steps as part of a process containing non-mental steps, but rather because computational methods which can be performed entirely in the human mind are the types of methods that embody the ‘basic tools of scientific and technological work’ that are free to all men and reserved exclusively to none.”). For example, in performing a background investigation of a suspect, an investigator might compile a list of categories of individuals to interview (e.g., family members, friends, prior employers). When interviewing the first family member, the investigator may learn of additional leads, and track each of those leads down before conducting the interview of the next family member. In the

applicants’ own words, this type of information classification and retrieval “can be viewed as a process of sending scouts to find a number of objects that resemble what one is looking for.” *Id.* at 2:13-15. Performing this same idea on “the Internet” does not make Claim 1 any less abstract. *See Bascom Glob. Internet Servs. Inc. v. AT&T Mobility LLC*, 827 F.3d 1341, 1348 (Fed. Cir. 2016) (“An abstract idea on ‘an Internet computer network’ or on a generic computer is still an abstract idea.”).

A patent may not claim a result, stripped of any application or implementation to achieve that result. Claim 1 is “aspirational in nature and devoid of any implementation details or technical description that would permit [a conclusion] that the claim as a whole is directed to something other than” searching for and identifying relevant information. *See Move, Inc. v. Real Estate Alliance Ltd.*, 721 F. App’x 950, 954-55 (Fed. Cir. 2018) (holding representative claim directed to “using a computer for locating available real estate properties” abstract even though “the claim limitations provide[d] steps for using the computer to perform the search”).

**(b) Similar claims have been found to constitute patent-ineligible subject matter.**

Courts have found similar patent claims to be ineligible. For example, in *Intellectual Ventures I LLC v. Erie Indemnity. Co.* (“*Erie*”), the Federal Circuit invalidated the following claim “relating to methods and apparatuses that use an index to locate desired information in a computer database”:

A method for searching a database of information, comprising the steps of:

receiving a request for information from a client, the request having a first term;

identifying a first XML tag that is associated with the first term;

determining whether a first metafile corresponds to the first XML tag;

if the first metafile corresponds to the first XML tag, then transmitting the first XML tag, the first metafile and query code to the client;

once the client conducts a query by executing the query code using the first XML tag and the first metafile, then receiving query results including a first set of XML tags from the client;

combining the first set of XML tags into a key;

using the key to search the database to locate records including the first set of XML tags, and delivering the records.

850 F.3d 1315, 1325 (Fed. Cir. 2017). The Federal Circuit concluded that this claim was abstract under *Alice*'s first step, noting that "organizing and accessing records through the creation of an index-searchable database, includes longstanding conduct that existed well before the advent of computers and the Internet." *Id.* The claim's use of XML tags did not transform the claims into patentable subject matter as the claims were "not focused on how usage of the XML tags alters the database in a way that leads to an improvement in the technology of computer databases." *Id.* at 1328. The claim failed the second *Alice* step because the use of XML tags and metafiles "do[es] not transform the claim into something beyond a conventional computer practice for facilitating searches" and, therefore, the claim did not "sufficiently recite how the inclusion of XML tags or metadata leads to an improvement in computer database technology through some non-conventional and non-generic arrangement of known, conventional pieces." *Id.* at 1329.

In *Collarity, Inc. v. Google, Inc.*, this Court invalidated the following claim:

A computer-implemented method comprising:

receiving, by a search system, from a user a search query comprising keywords;

using at least one association graph comprising keywords, identifying, by the search system, one or more suggested replacement keywords for one or more of the keywords of the search query;

presenting the suggested replacement keywords to the user;



responsively to a selection of one of the suggested replacement keywords by the user, substituting, by the search system, the selected suggested replacement keyword for the corresponding one of the keywords of the search query, to generate a refined search query; and

presenting search results to the user responsively to the refined search query, wherein identifying the one or more suggested replacement keywords comprises:

designating, by the search system, one or more of the keywords of the search query as anchor keywords, and the remaining keywords of the search query as non-anchor keywords; and

identifying, by the search system, the one or more suggested replacement keywords for one or more of the non-anchor keywords and not for any of the anchor keywords.

Case No. 11-1103-MPT, 2015 WL 7597413, at \*3 (D. Del. Nov. 25, 2015). The claim was abstract under *Alice* step one because it “simply recites a method with certain steps, such as ‘receiving’ a search query and ‘presenting search results,’ but imposes no tangible limitations on those steps, and could be “practiced using only the human mind and with pen and paper.” *Id.* at \*5-8. The claim lacked an inventive concept under *Alice* step two because it was not “rooted in computer technology,” “other than stating the method is ‘computer-implemented’ in the non-limiting preamble. *Id.* at \*8-9.

Similarly, in *Netflix, Inc. v. Rovi Corporation*, claims directed to a “search engine application” were held patent-ineligible under § 101. 114 F. Supp. 3d 927, 940-43 (N.D. Cal. 2015). The claim at issue recited:

A method for searching for shows comprising:

providing a search engine application;

receiving one or more characters in said search engine application, wherein said one or more characters are entered in an alphanumeric input area;

matching said characters using said search engine application to one or more database entries;

providing results corresponding to said database entries in a results listing, wherein said results comprise one or more show listings and one or more selectable categories of shows;

receiving a user selection from said results listing of one of said selectable categories;

providing at least one additional show listing corresponding to said selected selectable category in response to the user selection of said selected selectable category; and

enabling a user to perform an action by selecting one of said at least one additional show listings.

*Id.* at 941. Under *Alice*'s first step, the *Netflix* court found that the claim was directed to the abstract idea of "filtering search results using selectable categories." *Id.* The claim lacked an inventive concept under *Alice*'s second step because the "five-step process represents no more than an instruction to "implement the abstract idea" of using selectable categories to filter search results with "routine, conventional activity." *Id.* at 942.

The idea underlying Claim 1 of the '430 Patent is just as abstract as that of the *Erie*, *Collarity*, and *Netflix* claims. Claim 1 does not include any specific limitations or steps. Rather, the steps required to carry out the method are directed to the generic, conventional idea of searching a set of classified information to see if it contains a keyword. *See Cyberfone Sys., LLC v. CNN Interactive Grp., Inc.*, 558 F. App'x 988, 992 (Fed. Cir. 2014) (finding claim directed to "the well-known concept of categorical data storage, i.e., the idea of collecting information in classified form, then separating and transmitting that information according to its classification, is an abstract idea that is not patent-eligible"). That Claim 1 purports to conduct this search on the Internet does not make it any less abstract. *See, e.g., Ultramercial*, 772 F.3d at 716 (noting that "the use of the Internet is not sufficient to save otherwise abstract claims from ineligibility under § 101") (citation omitted).

By only claiming the desired result—searching for and identifying relevant information—without describing any specific roadmap for doing so, Claim 1 of the '430 Patent falls short of claiming eligible subject matter under § 101. *See Internet Patents*, 790 F.3d at 1348.

**2. *Alice* Step 2—Claim 1 contains no inventive concept to transform the abstract idea into patent-eligible subject matter.**

Because Claim 1 is directed to an abstract idea, the Court must next determine whether it contains an “inventive concept sufficient to transform the claimed abstract idea into a patent eligible application.” *Alice*, 134 S. Ct. at 2357 (internal quotations omitted). To pass this test, Claim 1 “must include additional features” that “must be more than well-understood, routine, conventional activity.” *Ultramercial*, 772 F.3d at 715 (quotation omitted). Here, Claim 1 is broadly generic and does not contain meaningful limitations that would restrict it to a non-routine, specific application of the abstract idea.

Claim 1 lacks an inventive concept. Not a single technical improvement is disclosed, much less claimed. Instead, each of the steps recited in Claim 1 of the '430 Patent is described only at a high level of generality as “starting from a base set of application-dependent web pages or crystallization points; and applying breadth-first recursive crawling.” No computer components are identified, other than the preamble’s recitation of the term “internet,” and no specialized programming is required or disclosed. Instead, all that is required is a base set of application-dependent CPs, which is merely a set of URLs for a given category of information. '430 Patent at 13:11-13. The breadth-first search simply takes one CP at a time and “explores” each of its links to see if it contains keywords from a predefined list. *Id.* at 13:19-35. The crawl “stops” if it reaches a page with no relevant links or if it has reached the maximum distance from the CP. *Id.* at 13:35-42. Nothing in Claim 1 even requires the use of a computer, much less a non-conventional one. As discussed, the steps in Claim 1 can be performed manually.

Claim 1 does not “improve the functioning of the computer itself,” *Alice*, 134 S. Ct. at 2359, for example by disclosing an “improved, particularized method of digital data compression” (*DDR Holdings, LLC v. Hotels.com, L.P.*, 773 F.3d 1245, 1259 (Fed. Cir. 2014)), or improve “the way a computer stores and retrieves data in memory” (*Enfish, LLC v. Microsoft Corp.*, 822 F.3d 1327, 1339 (Fed. Cir. 2016)). For example, in *Enfish*, the Federal Circuit distinguished the claims from others that “simply add[ed] conventional computer components to well-known business practices,” holding instead that “they [we]re drawn to a specific improvement to the way computers operate.” *Id.* at 1336. In particular, the unconventional structure of the database resulted in “increased flexibility, faster search times, and smaller memory requirements.” *Id.* at 1337. Unlike *Enfish*, nothing in Claim 1 of the ’430 Patent shows any unconventional methodology that would amount to a “specific improvement in the way computers operate.” Therefore, the focus of the ’430 Patent is not “on [a] specific asserted improvement in computer capabilities” but instead “on a process that qualifies as an ‘abstract idea’ for which computers are invoked merely as a tool.” *Id.* at 1336.

There is simply nothing “inventive” about searching for and identifying relevant information. *See, e.g. Netflix*, 114 F. Supp. 3d at 941. Moreover, the abstract functional descriptions in Claim 1 are devoid of any technical explanation as to how to implement the purported invention in an inventive way. *See In re TLI*, 823 F.3d at 615 (claims failed *Alice*’s step 2 where specification limited its discussion of “additional functionality” of conventional components “to abstract functional descriptions devoid of technical explanation as to how to implement the invention”); *see also Move*, 721 F. App’x at 955 (“While the claim limitations provide steps for using the computer to perform the search, they contain no technical details or explanation of how to implement the claimed abstract idea using the computer.”).

This case is thus unlike *Berkheimer*, where the Federal Circuit noted that the specification explicitly “describe[d] an inventive feature that store[d] parsed data in a purportedly unconventional manner.” *Berkheimer v. HP Inc.*, 881 F.3d 1360, 1369 (Fed. Cir. 2018). The Federal Circuit then examined whether the improvements described in the specification were included in the claims. For those claims where the inventive feature in the specification was “captured in the claims,” the Federal Circuit found a “factual dispute regarding whether the invention describe[d] well-understood, routine, and conventional activities.” *Id.* But where the claims did not recite the purportedly inventive features described in the specification, the Federal Circuit concluded that they were directed to patent ineligible subject matter under § 101. *Id.* Here, in contrast, there is no need for fact discovery at all because neither the claims nor the specification describes any unconventional components or the use of generic components in some unconventional manner. The claims therefore fail *Alice*’s second step because they contain no inventive features, and no amount of fact discovery can change that.

The recited limitations—whether considered individually or as an ordered combination—are insufficient to add “significantly more” to the abstract idea. Claim 1 does not satisfy *Alice*’s second step because “[t]he claim language does not provide any specific showing of what is inventive about the [limitation in question] or about the technology used to generate and process it.” *Secured Mail Solutions, LLC v. Universal Wilde, Inc.*, 873 F.3d 905, 912 (Fed. Cir. 2017); *see also Affinity Labs of Texas, LLC v. DirecTV*, 838 F.3d 1253, 1263 (Fed. Cir. 2016) (concluding that claims were ineligible under *Alice* step two where the allegedly inventive concept was not the “essential advance,” was only described functionally, and where there was “no further specification of a particular technology for” accomplishing the allegedly inventive concept).

### 3. The Remaining Claims Are Also Abstract.

Each of the remaining claims is directed to the same abstract idea of searching for and identifying relevant information, and, like Claim 1, all are written in purely functional terms. They are thus patent-ineligible for the same reasons.

For example, independent Claim 5 is directed to a method “for automatic determination of crawling parameters for crystallization points.” ’430 Patent at cl. 5. It consists of two steps: (1) applying application-specific ontology to mark relevant page hyperlinks coming out of a page; and (2) applying crawling up to a pre-defined depth over relevant links and up to another pre-defined depth over irrelevant links.” *Id.* at cl. 5. The specification describes this process as an “algorithm.” *Id.* at 16:10-12. For example, “[a]pplication specific ontology defines a list of ‘positive’ and ‘negative’ keywords.” *Id.* at 16:17-18. “[F]or [a] job posting application the words ‘career’, ‘job’, and ‘employment’ would be in the list of ‘positive’ keywords.” *Id.* at 16:18-20. No details are provided as to what would comprise the set of “negative keywords.” The links are divided into two categories: “ones that contain ‘positive keywords’ and do not contain ‘negative keywords’ . . . and other links that are chosen randomly.” *Id.* at 16:21-24. The links that contain “positive keywords” are crawled “up to a pre-defined depth,” and the links that contain “negative keywords” are crawled “only if the distance from the CP does not exceed a predefined number, which can be 4 or 5.” *Id.* at 16:27-29. No specialized programming or computer is required or disclosed to carry out the referenced “algorithm.”

Independent Claim 10 is directed to “[a] method for building a deep web crawler.” *Id.* at cl. 10. It consists of three steps: (1) “utilizing scout crawling rules to collect dynamic pages;” (2) “utilizing an analyzer and extractor to determine underlying structure of queries;” and (3) “generating instructions for a harvester, wherein the harvester provides requests to a server and

collects available pages from the server.” If a static URL is encountered, “generic crystallization point” principles are used to crawl the URL. *Id.* at 13:59-61. If a dynamic URL is encountered, the scout applies a “set of rules” to a standard DHTML form’s “controls” “that a current crawled page contains.” *Id.* at 14:30-33. This “set of rules” consists only of performing key-word search terms on a DHTML form, such as searching for the terms “job” or “openings” on a job board website. *Id.* at 14:36-42. The “extractor” extracts facts from the pages generated by the scout and “stores them in a database.” *Id.* at 14:60-62. The “analyzer” takes the pages generated by the scout and the facts extracted by the extractor and builds a “set of rules” for the harvester. *Id.* at 14:60-15:4. This “set of rules” consists of “a set of paths from the roots, which can be main pages of particular sections of companies’ web sites, to the relevant pages (e.g. individual job postings).” *Id.* at 15:5-8. The harvester “follows one rule at a time,” and “[w]hen it hits the form note it applies each combination of options/inputs determined by the [analyzer] and then proceeds with the static crawling obeying the rules for negative hyperlinks (URLs) and the force depth crawl” to obtain a set of relevant pages. *Id.* at 15:18-24. Like Claims 1 and 5, nothing in Claim 10 or the specification identifies any specialized programming or computer.

Each of the dependent claims is similarly described only in purely functional terms. For example, they relate to (i) using a “specific dictionary” to mark relevant links (Claim 2); (ii) performing the web crawl “to a predefined depth” over both relevant and irrelevant links (Claim 3); (iii) adding a CP to the list (Claim 4); (iv) applying “application-specific oracles” to mark relevant links (Claim 6); (v) building a “graph” (Claim 7); (vi) determining positive and negative keywords (Claim 8); (vii) calculating the “forced and maximum depth parameters (Claim 9); (viii) extracting data (Claim 11); (ix) specifying that the “scout crawling rules” are divided into rules for static and dynamic pages (Claim 12); (x) selecting a “plurality of questions” (Claim 13);

and (xi) “mapping” controls (Claim 14). The remaining dependent claims (Claims 14-27) relate to the functionality of the scout, extractor, and harvester in Claim 10. All of these claims are devoid of any meaningful limitations that would render them patent-eligible.

Like the abstract functional descriptions in Claim 1, each of the remaining claims is devoid of any technical explanation as to how to implement the purported invention in an inventive way. *See In re TLI*, 823 F.3d at 615 (claims failed *Alice*’s step 2 where specification limited its discussion of “additional functionality” of conventional components “to abstract functional descriptions devoid of technical explanation as to how to implement the invention”); *see also Move*, 721 F. App’x at 955 (“While the claim limitations provide steps for using the computer to perform the search, they contain no technical details or explanation of how to implement the claimed abstract idea using the computer.”). None of these additional features amounts to an inventive feature or renders the claims any less abstract.

Regardless of their form, therefore, all of the claims of the ’430 Patent fail both prongs of *Alice* because they are directed to an abstract idea and recite no inventive concept. *Alice*, 134 S. Ct. at 2355, 2357.

**C. The Disproportionate Risk of Preemption Confirms that the Claims Are Abstract.**

Because the claimed methods can be implemented using any process capable of categorizing and searching data, the ’430 Patent risks preempting *all* automated methods or systems for searching for and identifying relevant information. *See, e.g., Loyalty Conversion Sys. Corp. v. Am. Airlines, Inc.*, 66 F. Supp. 3d 829, 843 (E.D. Tex. 2014) (finding “preemptive effect . . . broad” where “the claims [were] largely functional in nature, they [did] not provide any significant description of the particular means by which the various recited functions are performed,” and “[a]ll that [was] disclosed [was] the ultimate objective”). Therefore, the claims



implicate the same preemption concern undergirding the § 101 analysis and should be found ineligible.

## **V. CONCLUSION**

For the foregoing reasons, Shutterstock respectfully requests that the Court dismiss Spider Search' Complaint for failure to state a claim upon which relief can be granted. Because leave to amend would be futile, Shutterstock requests dismissal with prejudice.

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